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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/367,060	10/22/1999	KATSUHIKO SATO	04724.0089	3826

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EXAMINER

JOHNSON, JONATHAN J

ART UNIT	PAPER NUMBER
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1725

9

DATE MAILED: 02/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/367,060

Applicant(s)

SATO ET AL.

Examiner

Jonathan Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 6-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, Claims 1-5 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki et al. (5,790,620). With respect to Claim 1, Okazaki et al. teach an emitting head body having a light guide member in the head (Figure 15, Item 28); a converging lens for converging the laser beams guided from the light guide member in the head (Figure 15, Item 76); a reflecting mirror for irradiating the portion to be machined with the converged laser beams (Figure 15, Item 55); a mirror rotating means for rotatively holding the reflecting mirror around the optical axis of the laser beam (Figure 15, item 56); distance adjusting means for adjusting the relative distance between the reflecting mirror and the converging lens and (Figure 15, item 57); a moving means for moving the reflecting mirror and the converging lens with the relative distance being

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maintained (Figure 15, item 59); wherein the light guide member in the head the converging lens and the reflecting mirror are inserted to and withdrawn from the portion to be machined in a narrow gap (Figure 15, Item 61).

With respect to Claim 2, the teachings of Okazaki et al. are the same as relied upon in the rejection of Claim 1. Okazaki et al. teach an emitting head is provided with a flat and elongated elevation support mechanism which is slidable by a frame elevating unit (Figure 15, Item 61 and 59); said elevation support mechanism is provided with an irradiation scan optical system constituted by a converging lens and reflecting mirror (Figure 15, item 76 and 55); and said frame elevating unit constitutes moving means for moving the converging lens and the reflecting mirror with the relative distance being maintained (Figure 15, Item 59).

With respect to Claim 3, the teachings of Okazaki et al. are the same as relied upon in the rejection of Claim 1. Okazaki et al. teach the light guide member in the head includes a cylindrical member and an optical member for causing the inside portion of the cylindrical member to be in an air state and the light guide member in the head is joined to the emitting head body of the emitting head such that the laser beams are guided to the converging lens (Figure 15, Item 80 and 76).

With respect to Claim 4, the teachings of Okazaki et al. are the same as relied upon in the rejection of Claim 1. Okazaki et al. teach the light guide member in the head is made of glass so as to guide the laser beams to said converging lens (Figure 15, item 28).

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With respect to Claim 5, the teachings of Okazaki et al. are the same as relied upon in the rejection of Claim 1. Okazaki et al. teach the optical path from the light guide member in the head to the converging lens and an optical path from the converging lens to the reflecting mirror are exposed to an environment and both optical paths are formed into spatial transmission passages realized by the environment (Figure 15, space in item 80).


Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

jj 
February 3, 2003


TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700